

Appendix A

TOKUNBO OGUNFUNMI

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1 EDUCATION

1.1 Institutions of Higher Education

- Stanford University, Stanford, California
Ph.D. in Electrical Engineering (1990)
M.S. in Electrical Engineering (1984)
- University of Ife, Ile-Ife, Nigeria
(now known as Obafemi Awolowo University (OAU), Ile-Ife, Nigeria),
B.Sc. in Electrical & Electronic Engineering (First Class Honours) (1980)

1.2 Titles of theses and dissertations

- *Efficient Methods for Time- and Transform-domain Adaptive Filtering and Spectral Analysis*,
Ph.D. dissertation, Prof. Allen Peterson, Advisor.
- *Design and Implementation of a Telluric amplifier for geophysical oil prospecting*,
B.Sc. thesis, Prof. B. Igbo, Advisor.

1.3 Honors and Awards

Academic Honors/Awards

- Carnegie African Diaspora Fellowship Award, Jan. 2015.
- Best Paper Award, (IEEE Signal Processing Systems (SiPS) Conference), Oct. 2005.
- Best Paper Award, (Information Systems Division, ASEE Conference), June 2009.
- Researcher of the Year Award, School of Engineering, Santa Clara University, 2002.
One of the highest honors bestowed by SCU School of Engineering. It was created to recognize scholarly achievements by faculty. Only one award is given annually.
- IEEE Senior Membership awarded March 25, 2000. (Awarded by the Institute of Electrical and Electronics Engineers (IEEE) in recognition of professional maturity and significant professional achievements.
- Wilmot Nicholson Fellowship, Santa Clara University, Santa Clara, CA (1994/95).
- Memberships in Honor Societies: Sigma Xi, the Scientific Research Society, Sept. 1995
- First Class Honours, University of Ife, Nigeria (1980).

2 ACADEMIC AND RELATED EXPERIENCE

2.1 Academic Positions

- Santa Clara University, Santa Clara, CA
 Sept. 2010 – August 2014 *Assoc. Dean, Research and Faculty Dev., School of Engineering.*
 June 2003 – Nov. 2003 *Acting Chair, Dept. of Electrical Engineering.*
 Sept. 2002 – date *Director of the Signal Processing Research Laboratory (SPRL)*
 Aug. 1996 – date *Associate Professor (with tenure) of Electrical Engineering.*
 September 1994 – August 1995 *Wilmot Nicholson Fellow*
 Sept. 1990 – Aug. 1996 *Assistant Professor of Electrical Engineering and Computer Science.*
 Also held the position of
 Sept. 1991 – June 2002 *co-Director of the Signal and Image Processing Laboratory (SIPL)*
- Covenant University, Ota-Lagos, Nigeria
 Jan. 2015 – Mar. 2015 *Carnegie Foundation Visiting Professor, Dept. of Electrical & Information Engineering.*
 Curriculum Development for Internet of Things (IoT), Graduate student mentoring, research supervision, in communications and in OFDM. Teaching Graduate classes in signal processing.
- University of Texas, Dallas, TX
 Sept. 2014 – Dec. 2014 *Visiting Professor, Dept. of Electrical Engineering.*
 Research in adaptive signal processing and in speech and multimedia compression).
- University of Texas, Arlington TX
 Jan. 2007 – Sept. 2007 *Visiting Professor, Dept. of Electrical Engineering.*
 Research in speech, multimedia compression and video coding (JVT H.264 standard).
- Stanford University, Stanford, CA
 Jan. 2000 – Sept. 2000 *Visiting Professor, Dept. of Electrical Engineering.*
 Research in adaptive signal processing and wireless communications.
- Stanford University, Stanford, CA
 Sept. 1986 – Sept. 1989 *Research Assistant and Teaching Assistant.*
 Research in Advanced Signal Processing development for the NASA Search for Extra-Terrestrial Intelligence (SETI) Project.
 Research in Computer-Aided Design (CAD) for VLSI Systems (Olympus Project).
 Teaching assistant for graduate courses. Organized tutorial sessions, graded papers, held office hours to tutor, etc. The courses include Digital Signal Processing (EE 263), Digital Filters (EE 264), Adaptive Signal Processing (EE 373), Telecommunication Transmission Systems (EE 374), Digital Telecommunication Switching (EE 392) and Advanced Digital Signal Processing (EE 485).
- University of Ibadan, Ibadan, Nigeria
 Jan. 1982 – November 1982 *Assistant Lecturer.*
 Taught undergraduates in junior-level courses including Circuit theory, Control Engineering and other freshman and sophomore-level basic Electrical Engineering courses. Developed and supervised laboratory work.

2.2 Teaching Experience

Courses Taught at SCU

Undergraduate:

- ELEN 021 Logic Design ,ELEN 033 Intro. to Digital Signal Processing Systems , ELEN 100 Electric Circuits II , ELEN 110 Linear Systems , ELEN 133 Digital Signal Processing , ELEN 111 Analysis of Linear Systems and Applications , ELEN 115 Electronic Circuits I , ELEN 134 Applications of Digital Signal Processing , ENGR 001 Introduction to Engineering

Graduate:

- ELEN 431 Adaptive Signal Processing I , ELEN 432 Adaptive Signal Processing II , ELEN 239 Adaptive Systems and Neural Networks , ELEN 389 VLSI Silicon Compilation , ELEN 435 Artificial Neural Networks , ELEN 233 Digital Signal Processing I , ELEN 234 Digital Signal Processing II, ELEN 247 Communications Systems Modelling Using Simulink, COEN 698 High-Performance Data Compression , ELEN 347 Advanced Digital Communications , ELEN 223 DSP System Design , ELEN 334 Statistical Signal Processing , ELEN 421 Speech Coding I, ELEN 247 Simulink for Communications/DSP

Other Courses taught

Under-graduate:

ELEN 194,195,196 (Senior Design Projects, every quarter)

ELEN 139, 199 (Undergrad. Independent Study, occassionally)

Graduate:

ELEN 297,298,299, 398 (Independent Study, MS/PhD Thesis Research, every quarter)

ELEN 200 (Research Seminar for several years)

2.3 Other Academic/Administrative Experience

Administrative Experience:

- Associate Dean, Research and Faculty Development, School of Engineering, SCU 2010-2014. Responsible to provide leadership and enhance engineering faculty/student research efforts and faculty development.

Tasks accomplished include:

- Provides leadership on the development and support of research programs in the school current examples include the school internal grant program and the school RA program
- Forms and chairs school research task forces or committees to help the associate dean review internal proposals and nominations, so as to give recommendations to the dean
- Leads the effort in developing and monitoring programs to support engineering faculty seeking tenure and promotion (assistant to associate, associate to full professor). Particular examples include mentoring efforts and NSF workshops
- Oversees School of Engineering Ph.D. programs (e.g. policies, student time limits, publication cases, complaints, commencements, PhD nights, etc.)
- Contributes as a member of the Graduate Program Leadership Council (GPLC) (works with GPLC on PhD policies)

- Oversees the Kuehler undergraduate research program
 - Assists the dean in reviewing engineering proposals to SCU internal grants and TSC grants
 - Reviews and approves (at school level) external grant proposals
 - In collaboration with the assistant dean, provides leadership in allocating financial support for graduate research students - current examples include the school PhD RA program and graduate scholarships/fellowships (e.g. Packard, Edwards, etc.).
 - Works with department chairs to allocate TAs and co-ordinates annual TA training
 - Recruit new faculty to ASEE and affiliated programs
 - Oversees and manages the Faculty Summer Research Grant program
- Acting Chair, Electrical Engineering Dept., June - Nov., 2003. Tasks accomplished include:
 - Preparations for ABET Visit
 - Initial Mid-tenure evaluation and Junior Faculty Development Leave (JFDL) process for a faculty member
 - Initial process for tenure application for a faculty member
 - Microwaves and RF Curriculum revision in the graduate program
 - Interview for a new Dept. Admin. Asst.
 - Dept. faculty meetings
 - Faculty responsible for several graduate courses in the general areas of *Signal Processing* in the electrical engineering department. This involves hiring adjunct faculty and overall curricula development. Some of the courses include ELEN 223, 229, 233, 234, 235(A)(B), 247, 334, 421, 422, 423, 431, 432, 433, 435, 439, 239, 249.

Advising and Mentoring

- Undergraduate advisees: about 25 students per year (meeting frequencies vary from once in few weeks to once a year).
- Graduate advisees: about 50 students per year (meeting frequencies vary from once a few weeks to once a quarter).
- I have written several references for SCU alumni and current students looking for jobs, for graduate school admissions, etc. I have also mentored and advised many students who are now alumni in important positions in the profession.

2.4 Research Grants and Gifts received

I have received grants, gifts and equipments donations worth upwards of \$750,000 for my research from the National Science Foundation, Hewlett-Packard, Toyota Information Technology Center, IBM, Synopsys, Xilinx and other companies. I have also received several internal research grants.

2.5 Curriculum Development

- New graduate courses developed: Simulink for Communications and DSP I (ELEN 247), Simulink for Communications and DSP II (ELEN 248) and FPGA Design for Communications and DSP (ELEN 348).
- New graduate courses developed: DSP System Development (ELEN 223), Estimation I (ELEN 235A), Estimation II (ELEN 235B), Speech Coding I (ELEN 421) Speech Coding II (ELEN 422) and Voice-over-IP (ELEN 423).
- Modified existing undergraduate and graduate courses. The areas are Applications of DSP (ELEN 134), Adaptive Signal Processing (ELEN 431, 432), and Estimation (ELEN 235).
- Modified emphasis areas of Signal Processing for the MSEE program (prepared course dependency charts)
- Co-developed two Graduate Certificate programs in DSP area in Electrical Engineering.
- Contributed to the BS EE Curriculum Revision of my alma mater, Obafemi Awolowo University (OAU), Nigeria.
- Developed a new BS Curriculum for a degree program in Engineering Internet of Things for Covenant University, Nigeria.

2.6 Student theses and projects supervised:

I have supervised 31 BS Theses, 20 MS theses, 8 Ph.D./Engineers degrees dissertations and many independent study project reports. Currently I have 5 PhD students at various stages of completion of their dissertations.

I have also served on about 14 Ph.D. thesis committees at Santa Clara University. Complete list is available on request.

2.7 Relevant non-academic professional experience

2.7.1 Industrial Employment

- Broadcom Corporation
1999 – 2000 *Consultant*.
Consulting work in the areas of Voice-over-IP chip design.
- JCF Engineering Services Co., San Jose, CA
March 1999 – June 2002 *Consultant*.
Engineering consulting work in the areas of digital signal processing, digital design, software development and electromagnetic interference.
- Allen Telecom Inc. (Signal Science), Santa Clara, CA March 98 – June 1998 Project consultant responsible for critical review of a CDMA network operator equipment design. The equipment is based on IS-95A, IS-97 and IS-98 specs for the CDMA standard and is designed to collect and analyze usage statistics of cellular phones. Provided support and answers to several technical questions in the area of wireless communications.

- MOLAN Corporation, Mountain View, CA
Dec. 1999 – March 2000 *Consultant*.
Consulting work in the areas of digital filter design, adaptive systems, digital signal processing implementations.
- DSP Group, Wireless Comm Division, NEC Corporation
1996 – 1997 *Consultant*.
Directed R & D work in the areas of digital signal processing development for speech coding (EVRC), and wireless 2G (IS-54, IS-95) communications.
- NIKON Precision Research Center, Belmont, CA
Dec. 1994 – March 1995 *Consultant*.
Consulting work in the areas of digital filter design, adaptive systems, digital signal processing implementations.
- Rockford Engineering Services, Inc., Sunol, CA
July 1990 – April 1991 *Consultant*.
Work on Electromagnetic Interference problems and digital design consultation.
- CLARIS Corp., Santa Clara, CA
Jan. 1990 – July 1990 *Consultant*.
Software engineering for a popular CAD product on the Macintosh.
- Stanford University's Center for Integrated Systems, Stanford, CA
April 1989 – October 1989 *Research Assistant*.
CAD Tools for VLSI design. Completed the conversion of the VLSI design language "L" to the "C" language.
- Stanford University's Center for Radar Astronomy, Stanford, CA
April 1985 – June 1988 *Research Assistant*.
VLSI design for high-performance digital signal processing. CAD tools for VLSI design. DSP Architecture and algorithms. Part of the team that designed three versions of the SETI-DSP engine (DSP chip) for use in NASA's Search for Extra-terrestrial Intelligence project.
- CASE Technology, Inc., Mountain View, CA
June 1987 – September 1987 *Applications Engineer*.
Test Engineering for their CAD-CAE systems all the way from design to PCB layout. Software development in Pascal.
- AT&T Bell Laboratories, Murray Hill, NJ
June 1986 – September 1986 *VLSI Design consultant*.
Designed a chip for implementing telecommunications protocols using AT&T's IDA VLSI Design Tools.

2.7.2 Other professional achievements

Registered Professional Engineer in the state of California (since 1994).

3 SCHOLARLY WORK

Research Interests: Digital and Adaptive Signal Processing, Artificial Neural Networks, Multimedia (Speech, Video) Signal Processing, Communications Applications of Signal Processing and VLSI Design. In summary, I have authored **4 books, 9 book chapters and published 160+ journal and conference papers** in these areas.

3.1 Publications

To be Submitted for Publication

- Koji Seto and **Ogunfunmi, Tokunbo**, *A Scalable Wideband Speech Codec Based on the iLBC*, to be re-submitted for publication to the IEEE Transactions on Speech, Audio and Language Processing (TSALP), May 2015.
- **Ogunfunmi, Tokunbo** and X. Qian, *Principles of Adaptive Filters*, in progress to be published by Taylor and Francis (CRC) Publishers, 2016.

Accepted but not yet published

- Safarian, Carlo, **Ogunfunmi, Tokunbo**, Mohanty, Basant and Kozacky, Walter, **Invited Paper: FPGA Implementation of LMS-Based FIR Adaptive Filter for Real-Time DSP Applications**, accepted at the 2015 Digital Signal Processing Conference (DSP 2015), Singapore, July 2015.
- Kozacky, Walter and **Ogunfunmi, Tokunbo**, **Invited Paper: Efficient DSP Implementation of an Adaptive Line Enhancer Based on the Convex Combination of two IIR Filters**, accepted at the 2015 Digital Signal Processing Conference (DSP 2015), Singapore, July 2015.

I. Books

1. **Ogunfunmi, Tokunbo**, Roberto Togneri and Sim Narasimha (Editors.), Speech and Audio Processing for Coding, Enhancement and Recognition; Book ID 310948; ISBN 978-1-4939-1455-5, Springer Publishers, 2015.
2. **Ogunfunmi, Tokunbo** and M.J.Narasimha, Principles of Speech Coding, published by Taylor and Francis (CRC) Publishers, April 2010.
3. **Ogunfunmi, Tokunbo** and M.J.Narasimha, Solutions to Principles of Speech Coding, published by Taylor and Francis (CRC) Publishers, April 2010.
4. **Ogunfunmi, Tokunbo**, Adaptive Nonlinear System Identification: The Volterra and Wiener Model Approaches, published by Springer Publishers, 2007.

II. Book Chapters

1. **Ogunfunmi, Tokunbo** and Koji Seto, *Scalable and MultiRate Speech Coding for VoIP Networks*, Book chapter in Speech and Audio Processing for Coding, Enhancement and Recognition; Book ID 310948; ISBN 978-1-4939-1455-5, Springer Publishers, 2015.

2. **Ogunfunmi, Tokunbo**, *What is Electrical Engineering and Why I am an Electrical Engineer*, Book chapter in Electrical Engineering for the Curious: Why Study Electrical Engineering?, Edited by Kishor Vaidya; ISBN 978-1-925128-48-2, Curious Academic Publishers, June 2015.
3. Allen, Brad, Haddad, Sam and **Ogunfunmi, Tokunbo**, *Damage Detection in Aging Aircraft: A neural network approach*, In Intelligent Engineering Systems Through Artificial Neural Networks, Vol. 5, 1995.
4. Haddad, Sam, Chatterji, Gano and **Ogunfunmi, Tokunbo**, *A Ball Bearing Fault Detector Using Neural Network Based Vibration Algorithms*, In Intelligent Engineering Systems Through Artificial Neural Networks, vol. 4, pp. 967-972, Nov. 1994.
5. Pham, Cuong and **Ogunfunmi, Tokunbo**, *Multiple-symbol differential detection of M-DPSK using Neural Network*, In Intelligent Engineering Systems Through Artificial Neural Networks, vol. 4, pp. 1181-1186, Nov. 1994.
6. **Ogunfunmi, Tokunbo**, Chen, Zhuobin and Haddad, Sam, *Vibration Signature Analysis Using Boltzmann Neural Networks*, In Intelligent Engineering Systems Through Artificial Neural Networks, Vol. 3, pp. 763-768, Nov. 1993.
7. **Ogunfunmi, Tokunbo** and Chen, Zhuobin, *The Inverse QR Backpropagation-based Neural Network and Its Applications*, In Intelligent Engineering Systems Through Artificial Neural Networks, Vol. 3, pp. 863-868, Nov. 1993.
8. Peavey, David and **Ogunfunmi, Tokunbo**, *Least-squares algorithms for multi-layer neural networks based on the QR algorithm*, In Intelligent Engineering Systems through Artificial Neural Networks, Vol. 2, pp 215-220, Nov. 1992.
9. **Ogunfunmi, Tokunbo**. and Wadhwa, S., *New architectures for the A/D converter application of the Hopfield neural network*, In Intelligent Engineering Systems Through Artificial Neural Networks, Vol. 1, pp. 47-52, Nov. 1991.

III. Journal Papers

1. **Ogunfunmi, Tokunbo** and Paul, Thomas , *The Quaternion Maximum Correntropy Algorithm*, IEEE Transactions on Circuits and Systems-II (TCAS-II), Jan. 2015.
2. Paul, Thomas and **Ogunfunmi, Tokunbo**, *A Kernel Adaptive Algorithm for Quaternion-Valued Inputs*, IEEE Transactions on Neural Networks and Learning Systems (TNNLS), Dec. 2014
3. **Tokunbo Ogunfunmi**, Ravi Ramachandran and Joos Vandewalle, *Guest Editorial*, Special Issue of the IEEE Circuits and Systems, Spring 2014.
4. **Tokunbo Ogunfunmi**, Geoffrey Herman and Mahmud Rahman, *On the use of Concept Inventories for Circuits and Systems Courses*, IEEE Circuits and Systems, Spring 2014.
5. Obianuju Ndili and **Tokunbo Ogunfunmi**, *Fast Algorithm and Efficient Architecture for Integer and Fractional Motion Estimation*, Journal of Signal Processing Systems, June 2014.
6. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *Convergence Analysis of an Adaptive Algorithm with Output Power Constraints*, IEEE Transactions on Circuits and Systems (TCAS-II), March 2014

7. Koji Seto and **Ogunfunmi, Tokunbo**, *Scalable Speech Coding for IP Networks: Beyond iLBC*, IEEE Transactions on Speech, Audio and Language Processing (TSALP), July 2013.
8. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *A Cascaded IIR-FIR Adaptive ANC Systems with Output Power Constraints*, Signal Processing journal, June 2013.
9. Wally Kozacky and **Ogunfunmi, Tokunbo**, *Frequency-Domain LMS Algorithms with Gain and Power Constraints on the Adaptive Filter*, Signal Processing journal, June 2013.
10. **Ogunfunmi, Tokunbo**, and Obianuju Ndili, *Fast Algorithm and Efficient Architecture for Integer and Fractional Motion Estimation*, Journal of Signal Processing Systems, June 2013.
11. Thomas Paul and **Ogunfunmi, Tokunbo**, *A Study of the Convergence Behavior of the Complex Kernel LMS Algorithm*, IEEE Transactions on Neural Networks and Learning Systems (TNNLS), March. 2013.
12. Wally Kozacky and **Ogunfunmi, Tokunbo**, *An active noise control algorithm with gain and power constraints on the Adaptive Filter*, EURASIP Journal on Advances in Signal Processing, Feb. 2013.
13. Park, Jeong Sung and **Ogunfunmi, Tokunbo**, *Efficient FPGA-based Implementation of MIMO-OFDM Physical Layer*, Circuits, Systems and Signal Processing (CSSP), April 2012.
14. **Ogunfunmi, Tokunbo** and Narasimha, M.J., *Advanced Signal Processing for Speech on Voice-over-IP (VoIP) Networks*, IEEE Circuits and Systems, April 2012.
15. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *Algorithm and Architecture Co-Design of Hardware-Oriented Modified Diamond Search For Fast Motion Estimation in H.264/AVC*, IEEE Transactions on Circuits and Systems for Video Technology, (TCSVT), vol. 21, No. 9, Sept. 2011.
16. Paul, Thomas and **Ogunfunmi, Tokunbo**, *On the convergence of the Affine Projection Algorithm*, IEEE Transactions on Circuits and Systems-I, (TCAS-I), vol. 58, No. 8, Aug. 2011.
17. Umoh, Ifiok and **Ogunfunmi, Tokunbo**, *An Affine-Projection-Based Algorithm for Identification of Nonlinear Hammerstein Systems*, Signal Processing journal, vol. 90, Issue 6, pp. 2020-2030, June 2010.
18. **Ogunfunmi, Tokunbo**, *Invited paper: A simulation model of PHY layer of the IEEE 802.11n Wireless Local Area Networks Standard*, Special Issue on Web-Based Learning: Innovations and Challenges, of Knowledge Management and E-Learning: An International Journal (KM&EL), Nov. 2009.
19. **Ogunfunmi, Tokunbo**, *Book Review of Adaptive Filtering: Algorithms and Practical Implementation, 3rd Edition, by Paulo S.R. Diniz*, in journal IEEE Communications, Oct. 2009.
20. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *FPSoc-Based Architecture for a Fast Motion Estimation Algorithm in H.264/AVC*, EURASIP Journal on Embedded Systems, vol. 2009, Article ID 893897, 16 pages, 2009
21. Paul, Thomas and **Ogunfunmi, Tokunbo**, *Evolution, Insights and Challenges of the PHY Layer for the Emerging IEEE 802.11n Amendment*, IEEE Communications Surveys and Tutorials journal, vol. 11, No. 4, Fourth Quarter, 2009.

22. Umoh, Ifiok and **Ogunfunmi, Tokunbo**, *An Adaptive Hammerstein Filter for System Identification*, EURASIP Journal of Advances in Signal Processing, vol. 2009, Article ID 859698, May 2009.
23. **Ogunfunmi, Tokunbo** and Paul, Thomas , *Analysis of Convergence of a Frequency-domain LMS Adaptive Filter Implemented as a Multi-Stage Adaptive Filter*, Journal of Signal Processing Systems (formerly known as VLSI Signal Processing Journal), vol. 56, Issue 2, pg. 341-350, 2009.
24. Paul, Thomas and **Ogunfunmi, Tokunbo**, *Wireless LAN Comes of Age: Understanding the IEEE 802.11n Amendment*, IEEE Circuits and Systems, vol. 8, No. 1, pp. 28-54, March 2008. **This was one of top 10 most downloaded from IEEE Xplore 9/08**
25. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *Achieving Maximum Possible Speed on Constrained Block Transmission Systems*, EURASIP Journal on Advances in Signal Processing, vol. 2007, Article ID 35689, pp.1-11, Jan. 2007.
26. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Stochastic-gradient-based third-order Volterra system identification by using nonlinear Wiener adaptive algorithm*, IEE Proceedings on Vision, Image and Signal Processing, vol. 150, No. 2, pp. 90-98, Apr. 2003.
27. Jamali, Hamadi and **Ogunfunmi, Tokunbo**, *Stationary points of the finite-length Constant Modulus Optimization*, Signal Processing, vol. 82, pp. 625-641, March 2002.
28. **Ogunfunmi, Tokunbo** and Chang, Shue-Lee, *Second-order adaptive Volterra system identification based on discrete nonlinear Wiener model*, IEE Proceedings on Vision, Image and Signal Processing, vol. 148, No. 1, pp. 21-29, Feb. 2001.
29. Zhao, Wanda and **Ogunfunmi, Tokunbo**, *Pitch and Formant Detection Using Wigner-Ville Time-Frequency Distribution*, International Journal of Speech Technology, Vol. 3, pp. 35-49, Nov. 1999.
30. Shih, Chen-Wei, **Ogunfunmi, Tokunbo** and Ling, Nam, *Memory Reduction by Haar Wavelet Transform for MPEG Decoder*, IEEE Transactions on Consumer Electronics, vol. 45, No. 3, pp. 867-874, August 1999.
31. Worsley, Debra and **Ogunfunmi, Tokunbo**, *Isochronous Ethernet - an Asynchronous Transfer Mode (ATM) Bridge for Multimedia Networking*, IEEE Multimedia, vol. 4, Issue 1, pp. 58-67, Jan.-March 1997.
32. Chren, William, Cleaver, Thomas, Cook, Clare, **Ogunfunmi, Tokunbo**, Richolson, Ron and Vai, Mike, *Introducing Electronic Design Automation Tools into the Engineering Curriculum*, Journal of Engineering Education, July 1996.
33. **Ogunfunmi, Tokunbo**, *Invited Paper: Least-squares optimization methods for multilayer feedforward artificial neural networks*, Proceedings of the 1996 INFORMS Conference, Washington, D.C.
34. **Ogunfunmi, Tokunbo** and Au, Michael, *Two-dimensional Discrete orthogonal transform by means of two-dimensional LMS Adaptive Algorithms*, IEICE Transactions on Fundamentals of Electronics, Communications and Computer Science, Vol. E78-A, No. 9, Sept. 1995.

35. **Ogunfunmi, Tokunbo** and Peterson, A.M., *On the implementation of the frequency-domain LMS adaptive filter*, IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing, Vol. 39, Number 5, pp. 318-322, May 1992.
36. **Ogunfunmi, Tokunbo**, *Adaptive filtering using the modified Fermat Number transform*, Electronics Letters, Volume: 27 Issue: 3 , pp. 282-284, Jan. 31,, 1991.

IV. Refereed Conference Papers

1. Seto, Koji and **Ogunfunmi, Tokunbo**, *Invited Paper: Performance-Enhanced Scalable Wideband Speech Coding for IP Networks*, Proceedings of the 2014 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA, Nov. 2014.
2. Ifio Umoh and **Tokunbo Ogunfunmi**, *Digital Post-Distortion Linearization of Wideband Wireless Receiver Nonlinearity*, Proceedings of the 2014 IEEE Midwest Symposium on Circuits and Systems (MWSCAS), College Station, TX, August 2014.
3. Seto, Koji and **Ogunfunmi, Tokunbo**, *Packet-Loss Robust Scalable Speech Coding Using the Discrete Wavelet Transform*, Proceedings of the 2014 IEEE International Symposium on Circuits and Systems (ISCAS), June 2014.
4. Md. Abdus Sattar, Norman Gunter, Mahmud Rahman and **Tokunbo Ogunfunmi**, *A Novel Pedagogical Method for Integrated Circuit and Systems Education Using the Variational Thermodynamic Principle*, Proceedings of the 2014 IEEE International Symposium on Circuits and Systems (ISCAS), Melbourne, Australia June 2014.
5. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *An Adaptive Line Enhancer Based on a Convex combination of Two IIR Filters*, Proceedings of the 2014 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), May 2014.
6. Jeoonsung Park and **Ogunfunmi, Tokunbo**, *A new VLSI Architecture for 3-D DCT Video Compression System*, Proceedings of the 2013 IEEE Signal Processing Systems (SiPS) Conference, Taipei, Taiwan, Oct. 2013.
7. **Ogunfunmi, Tokunbo**, and Thomas Paul, *Invited Paper: An Alternative Kernel Adaptive Filtering Algorithm for Quaternion-Valued Data*, Proceedings of the 2012 IEEE Asian Pacific Signal Processing Conference (APSIPA ASC), Hollywood, CA, Dec. 2012.
8. Seto, Koji and **Ogunfunmi, Tokunbo**, *Invited Paper: Scalable Wideband Speech Coding over IP Networks*, Proceedings of the 2012 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA, Nov. 2012.
9. **Ogunfunmi, Tokunbo**, Obianuju Ndili and Pavel Arnaudov, *On Low Power Fractional Motion Estimation Algorithms for H.264*, Proceedings of the 2012 IEEE Signal Processing Systems (SiPS) Conference, Montreal, Quebec, Oct. 2012.
10. Park, Jeong Sung and **Ogunfunmi, Tokunbo**, *A New Approach for Image Quality Assessment: Frequency Similarity Method (FSM)*, Proceedings of the 2012 IEEE International Conference on Industrial Electronics and Automation (ICIEA), Singapore, , July 2012.
11. **Ogunfunmi, Tokunbo**, *Multimedia Systems Education Innovation: Speech*, Proceedings of the 2012 ASEE Annual Conference, June 2012.

12. Hardell, David and **Ogunfunmi, Tokunbo**, *Linear Prediction Whitening with Convex Combining in Constant Modulus Equalizers*, Proceedings of the 2012 IEEE International Symposium on Circuits and Systems (ISCAS), Seoul, Korea, May 2012.
13. Seto, Koji and **Ogunfunmi, Tokunbo**, *Scalable Mult-Rate iLBC*, Proceedings of the 2012 IEEE International Symposium on Circuits and Systems (ISCAS), Seoul, Korea, May 2012.
14. Paul, Thomas and **Ogunfunmi, Tokunbo**, *Analysis of the Convergence Behavior of the Complex Kernel LMS Algorithm*, Proceedings of the 2012 IEEE International Symposium on Circuits and Systems (ISCAS), Seoul, Korea, May 2012.
15. Arjuna Madanayake et. al. and **Ogunfunmi, Tokunbo**, *Teaching Freshmen VHDL-Based Digital Design*, Proceedings of the 2012 IEEE International Symposium on Circuits and Systems (ISCAS), Seoul, Korea, May 2012.
16. Seto, Koji and **Ogunfunmi, Tokunbo**, *Performance-Enhanced Multi-Rate iLBC*, Proceedings of the 2011 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA, Nov. 2011.
17. **Ogunfunmi, Tokunbo** and Paul, Thomas, *Invited Paper: Kernel-based APA Adaptive Filters for Complex Data*, Proceedings of the 2011 IEEE Asian Pacific Signal Processing Conference (APSIPA ASC), Xian, China, Oct. 2011.
18. **Ogunfunmi, Tokunbo** and Drullinger, Todd, *Invited Paper: Equalization of Non-Linear Channels Using a Volterra-based Non-Linear Adaptive Equalizer*, Proceedings of the 2011 IEEE Midwest Symposium on Circuits and Systems (MWSCAS), Seoul, S. Korea, Aug. 2011.
19. Kim, Min, Eun, Changsoo and **Ogunfunmi, Tokunbo**, *Invited Paper: The effect of HPA Non-linearity on the Repeater Signal with Feedback and Combined Compensation*, Proceedings of the 2011 IEEE Midwest Symposium on Circuits and Systems (MWSCAS), Seoul, S. Korea, Aug. 2011.
20. **Ogunfunmi, Tokunbo** and Rahman, Mahmud, *Concept Inventory Assessment Instruments for Circuits Courses*, Proceedings of the 2011 ASEE Annual Conference, June 2011.
21. **Ogunfunmi, Tokunbo** and Paul, Thomas, *Invited Paper: On The Complex Kernel-Based Adaptive Filter*, Proceedings of the 2011 IEEE International Symposium on Circuits and Systems (ISCAS), Rio de Janeiro, Brazil, May 2011.
22. Umoh, Ifiok and **Ogunfunmi, Tokunbo**, *Invited Paper: Digital Post-Linearization of a Wideband Low Noise Amplifier for Ultra-Wideband Wireless Receivers*, Proceedings of the 2011 IEEE International Symposium on Circuits and Systems (ISCAS), Rio de Janeiro, Brazil, May 2011.
23. **Ogunfunmi, Tokunbo**, *Invited Paper: Analysis of Assessment Using Signals, Systems Concept Inventory and other Tests for Systems and DSP Courses*, Proceedings of the 2011 IEEE International Symposium on Circuits and Systems (ISCAS), Rio de Janeiro, Brazil, May 2011.
24. Park, JeongSung and **Ogunfunmi, Tokunbo**, *FPGA Implementation of Channel Estimation for MIMO-OFDM*, Proceedings of the 2011 IEEE International Symposium on Circuits and Systems (ISCAS), Rio de Janeiro, Brazil, May 2011.

25. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *An Efficient Fast Algorithm and FPSoC for Integer and Fractional Motion Estimation in H.264/AVC*, Proceedings of the IEEE International Conference on Consumer Electronics (ICCE), Jan. 2011.
26. Park, Jeong Sung and **Ogunfunmi, Tokunbo**, *A VLSI Architecture of SVC Encoder for Mobile System*, Proceedings of the IEEE International Conference on Consumer Electronics (ICCE), Jan. 2011.
27. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *Efficient Sub-Pixel Interpolation and Low Power VLSI Architecture For Fractional Motion Estimation in H.264/AVC*, Proceedings of the 4th International Conference on Signal Processing and Communication Systems (ICSPCS), Australia Dec. 2010.
28. **Ogunfunmi, Tokunbo** and Paul, Thomas, **Invited Paper: On the Performance of Affine Projection Algorithm and Normalized LMS Algorithm**, Proceedings of the 2010 IEEE APSIPA Conference, Singapore, Dec. 2010.
29. **Ogunfunmi, Tokunbo**, *Invited Paper: An Alternative View of Nonlinear Adaptive Filters*, Proceedings of the 2010 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA. Nov. 2010.
30. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *An Adaptive IIR Filter with Constraints on the Output Power Level*, Proceedings of the 2010 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA. Nov. 2010.
31. Umoh, Ifiok, Al-Attar, Talal and **Ogunfunmi, Tokunbo**, *A 0.18um CMOS Narrow-band LNA Linearization using Digital Base-band Post-Distortion*, Proceedings of the 2010 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA. Nov. 2010.
32. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *An Efficient Hardware Oriented Algorithm and Its Low Power VLSI Design for Fast Integer-Pel Fast Motion Estimation in H.264/AVC*, Proceedings of the IEEE/ECSI/EURASIP Conference on Design and Architectures for Signal and Image Processing, (DASIP), Oct. 2010.
33. Seto, Koji and **Ogunfunmi, Tokunbo**, *Multi-rate iLBC Using DCT*, Proceedings of the IEEE Signal Processing Systems (SiPS) Workshop, Oct. 2010.
34. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *Hardware Oriented Modified Diamond Search for Motion Estimation in H.264/AVC*, Proceedings of the 2010 IEEE International Conference on Image Processing (ICIP), Sept. 2010.
35. Abel, Suchitra, Akhbari, Hussain and **Ogunfunmi, Tokunbo**, *Application of Clustering Algorithm to LISA Project*, Journal of Physics: Conference Series, Aug. 2010.
36. Park, Jeong Sung and **Ogunfunmi, Tokunbo**, *FPGA Implementation of the MIMO-OFDM Physical Layer Using Single FFT Multiplexing*, Proceedings of the 2010 IEEE International Symposium on Circuits and Systems (ISCAS), May 2010.
37. **Ogunfunmi, Tokunbo** and Rahman, Mahmud *Invited Paper: A Concept Inventory for an Electric Circuits Course : Rationale and Fundamental Topics*, Proceedings of the 2010 IEEE International Symposium on Circuits and Systems (ISCAS), May 2010.

38. Rahman, Mahmud and **Ogunfunmi, Tokunbo**, *Invited Paper: A Set of Questions for a Concept Inventory for DC Circuits Course*, Proceedings of the 2010 IEEE International Symposium on Circuits and Systems (ISCAS), May 2010.
39. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *Convergence Analysis of a Frequency-Domain Adaptive Filter With Constraints on the Output Weights*, Proceedings of the 2009 IEEE Asilomar Conference on Signals, Systems and Computers, Asilomar, CA. Nov. 2009.
40. Kozacky, Wally and **Ogunfunmi, Tokunbo**, *A Frequency-Domain Adaptive Algorithm Filter With Constraints on the Output Weights*, Proceedings of the 2009 IEEE International Symposium on Circuits and Systems (ISCAS), May 2009.
41. Park, Jeong-Song and **Ogunfunmi, Tokunbo**, *A Minimal Hardware Implementation of the H.264 8x8 Transformation and Quantization*, Proceedings of the 2009 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), April 2009.
42. **Ogunfunmi, Tokunbo**, *IEEE 802.11n Wireless Local Area Networks Standard*, Proceedings of the 2009 ASEE Annual Conference, June 2009. **This paper won a Best Paper Award.**
43. **Ogunfunmi, Tokunbo**, *Experiences with Assessment for Systems Courses*, Proceedings of the 2009 ASEE Annual Conference, June 2009.
44. **Ogunfunmi, Tokunbo**, *New Curriculum Development for a Top African University*, Proceedings of the 2009 ASEE Annual Conference, June 2009.
45. **Ogunfunmi, Tokunbo**, *FPGA Architectures for H.264 Video Processing*, Proceedings of the IEEE Workshop on FPGAs for Digital Signal Processing Applications, IEEE SPS Santa Clara Valley Section, Feb. 7, 2009.
46. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *A Hardware Oriented Integer-Pel Fast Motion Estimation Algorithm in H.264/AVC*, Proceedings of the IEEE/ECSI/EURASIP Conference on Design and Architectures for Signal and Image Processing, (DASIP), Nov. 2008.
47. Umoh, Ifioke and **Ogunfunmi, Tokunbo**, *Adaptive Hammerstein Filters Using the Affine Projection Algorithm*, Proceedings of the EURASIP European Signal Processing Conference, (EUSIPCO), Aug. 2008.
48. **Ogunfunmi, Tokunbo**, *Pedagogy of a Course on Speech Coding and VoIP*, Proceedings of the 2008 ASEE Annual Conference, June 2008.
49. **Ogunfunmi, Tokunbo**, *Impact and Results of Minority Engineering Student Advising and Mentoring for Career Advancement*, Proceedings of the 2008 ASEE Annual Conference, June 2008.
50. Umoh, Ifioke and **Ogunfunmi, Tokunbo**, *Adaptive Hammerstein Filters Using the Affine Projection Algorithm*, Proceedings of the EURASIP European Signal Processing Conference, (EUSIPCO), Aug. 2008.
51. **Ogunfunmi, Tokunbo**, *Pedagogy of a Course on Speech Coding and VoIP*, Proceedings of the 2008 ASEE Annual Conference, June 2008.
52. **Ogunfunmi, Tokunbo**, *Impact and Results of Minority Engineering Student Advising and Mentoring for Career Advancement*, Proceedings of the 2008 ASEE Annual Conference, June 2008.

53. Ndili, Obianuju and **Ogunfunmi, Tokunbo**, *Achieving Maximum Possible Download Speed on ADSL Systems*, Proceedings of the IEEE Signal Processing Systems (SiPS2007) Workshop, Oct. 2007.
54. **Ogunfunmi, Tokunbo**, *Analysis of Assessment Results in a Linear Systems Course*, Proceedings of the American Society for Engineering Education (ASEE) Annual Conference, Honolulu, June 2007.
55. **Ogunfunmi, Tokunbo**, *Invited Paer: Minority Graduate Student Advising and Mentoring for Career Advancement*, Proceedings of the American Society for Engineering Education (ASEE) Annual Conference, Honolulu, June 2007.
56. Han, Shi-Lei and **Ogunfunmi, Tokunbo**, *Real-Time Ogg Vorbis Audio Decoder on the TMS320C6416 DSK*, Proceedings of the Texas Instruments Developer Conference, Dallas, Texas, March 2007.
57. Umoh, Ifiok and **Ogunfunmi, Tokunbo**, *Semi-Blind Channel Estimation for OFDM Using Least-Squares*, Proceedings of the IEEE Signal Processing Systems (SiPS) Conference, Oct. 2006.
58. **Ogunfunmi, Tokunbo** and Paul, Thomas , *On the Convergence of the Frequency-domain LMS Adaptive Filter Using LMS-DFT*, Proceedings of the IEEE Signal Processing Systems (SiPS) Conference, Oct. 2006.
59. **Ogunfunmi, Tokunbo** and Jamali, Hamadi, *Performance Bounds on the Constant Modulus Error Surface*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), May 2006.
60. Umoh, Ifiok and **Ogunfunmi, Tokunbo**, *Lower Bounds for the MSE Convergence of APA*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), May 2006.
61. **Ogunfunmi, Tokunbo** *On the Implementation of a 3D Flexible Macroblock Ordering for H.264/AVC*, Proceedings of the Texas Instruments Developer Conference, Feb. 2006.
62. Yongpeng Zhang, Cajetan Akujuobi, **Ogunfunmi, Tokunbo** and Matthew Sadiku *Robust Motor Controller Design Implemented with TMS320F240 DSP*, Proceedings of the Texas Instruments Developer Conference, Feb. 2006.
63. **Ogunfunmi, Tokunbo** and Ndili, Obianuju, *On the Performance of a 3D Flexible MacroBlock Ordering for H.264/AVC*, Proceedings of the IEEE International Conference on Consumer Electronics (ICCE), Las Vegas, Jan. 2006.
64. Obianuju Ndili and **Ogunfunmi, Tokunbo**, *Capacity of Block Transmission Systems with Quantized Inputs and Outputs*, Proceedings of the IEEE Signal Processing Systems (SiPS) Conference, Nov. 2005. **This paper won a Best Student Paper Award**
65. Wang, Xiaosong and **Ogunfunmi, Tokunbo**, *Error Resilient Multiplexed Source Code with RVLIC*, Proceedings of the EURASIP European Signal Processing Conference (EUSIPCO), September 2005.

66. **Ogunfunmi, Tokunbo** and William Huang, *A Flexible MacroBlock Ordering With 3D MBAMap for H.264/AVC*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), Kobe, Japan, May 2005.
67. **Ogunfunmi, Tokunbo**, *Realizing Higher-Order Nonlinear Wiener Adaptive Systems*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), Kobe, Japan, May 2005.
68. **Ogunfunmi, Tokunbo**, Navneet Ayer and William Huang, *Implementation of H.263++ video codec in real-time application on the TMS320C6X DSP*, Proceedings of the Texas Instruments Developer Conference, Houston, Texas, Feb. 2004.
69. **Ogunfunmi, Tokunbo**, *Innovations in Digital Signal Processing Education*, Proceedings of the ASEE Pacific South West (PSW) Conference, Stockton, CA, April 2004.
70. **Ogunfunmi, Tokunbo** and Michael Kearny, *A Fixed-point Finite Precision Effects Analysis of Fast Quasi-Newton and RLS Adaptive Algorithms*, Proceedings of the IEEE Midwest Symposium on Circuits and Systems, Cairo, Egypt, Dec. 2003.
71. **Ogunfunmi, Tokunbo** and James Foote, *A Real-Time Multi-channel ITU-T G.729/A Vocoder Application on the TMS320C6201 DSP*, Proceedings of the IEEE Midwest Symposium on Circuits and Systems, Cairo, Egypt, Dec. 2003.
72. **Ogunfunmi, Tokunbo**, *Third-order nonlinear Wiener adaptive filtering for correlated Gaussian inputs*, Proceedings of the 2003 IASTED International Conference on Circuits, Signals and and Systems, Cancun, Mexico, May 2003.
73. Jamali Hamadi and **Ogunfunmi, Tokunbo**, *Constant Modulus Performance Search Using LMS Method*, Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2003), Hong Kong, April 2003.
74. **Ogunfunmi, Tokunbo** and Orth, Ryan, *Performance of Multi-mode Algorithms for Blind Equalization of M-QAM Signals*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), Scottsdale, Arizona, May 2002.
75. **Ogunfunmi, Tokunbo** and Jamali, Hamadi, *Constant Modulus Performance Search Using Newton's Method*, Proceedings of IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), vol.4, pp.2165-2168, Salt Lake City, UT, May 2001.
76. Jamali, Hamadi and **Ogunfunmi, Tokunbo**, *Optimality Conditions of the Constant Modulus Minimization*, presented at the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Salt Lake City, UT, May 2001.
77. Jamali, Hamadi and **Ogunfunmi, Tokunbo**, *Homotopy Continuation methods for solving the constant modulus minimization*, Proceedings of the Systems, Cybernetics and Intelligence (SCI) Conference, Orlando, FL, July 2001.
78. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Transform-domain Second-order Nonlinear Wiener Adaptive Filtering for Colored Gaussian Signals*, Proceedings of the IEEE Workshop on Signal Processing Systems (SIPS), pp. 811-819, Lafayette, LA, Aug. 2000.

79. Shih, Chen-Wei, **Ogunfunmi, Tokunbo** and Ling, Nam, *Wavelet-based Embedded Memory Reduction for MPEG Decoder*, Proceedings of the IEEE Third International Workshop on MultiMedia Signal Processing (MMSP), pp. 327-332, Copenhagen, Denmark, Sept. 1999.
80. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Performance Analysis of Third-Order Nonlinear Wiener Adaptive Systems*, Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing(ICASSP), vol.3, pp.1689-1692, 1999.
81. Shih, Chen-Wei, Ling, Nam and **Ogunfunmi, Tokunbo**, *Memory Reduction by Haar Wavelet Transform for MPEG Decoder*, Proceedings of the IEEE International Conference on Consumer Electronics (ICCE), pp. 116-117, 1999.
82. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Volterra adaptive system identification based on nonlinear Wiener model*, Proceedings of the IASTED International Conference on Signal Processing (SIP), 1998.
83. **Ogunfunmi, Tokunbo** and Chang, Shue-Lee, *Nonlinear Adaptive Filters: Comparisons of the Wiener and Volterra models*, Proceedings of ICSPAT Conference, 1998.
84. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *An improved nonlinear adaptive filter and PDF estimator using the Discrete Fourier Transform*, Proceedings of the IEEE DSP Workshop, Utah, 1998.
85. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *LMS/LMF and RLS Volterra System Identification based on the Nonlinear Wiener Model*, Proceedings of IEEE International Symposium on Circuits and Systems (ISCAS), vol. 5, pp. 206-209, 1998.
86. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Performance Analysis of Nonlinear adaptive filter based on the LMS algorithm*, Proceedings of the 31st IEEE Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 107-110, 1997.
87. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *Recursive orthogonal least squares method and its application in non-linear adaptive filtering*, Proceedings of IEEE Military Communications Conference (MILCOM), vol. 3, pp. 1392-1396, 1997.
88. Peavey, David and **Ogunfunmi, Tokunbo**, *The Single-Channel Interferometer using a pseudo-doppler direction finding system*, Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, (ICASSP), 1997.
89. Pham, Cuong and **Ogunfunmi, Tokunbo**, *On the Recursive Total Least Squares*, Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, (ICASSP), pp. 1989 -1992 vol.3, 1997.
90. Reagan, John and **Ogunfunmi, Tokunbo**, *A LORAF-based coherent sidelobe canceller for narrowband adaptive beamforming applications*, Proceedings of the 30th IEEE Asilomar Conference on Circuits, Systems and Computers, vol. 1, pp. 556-560, Asilomar, CA, Nov. 1996.
91. Cooper, Evert and **Ogunfunmi, Tokunbo**, *Cancellation of Mechanical Resonances*, Proceedings of the 30th IEEE Asilomar Conference on Signals, Systems and Computers, 1996, vol.2, pp. 833-838, Asilomar CA, Nov. 1996.

92. Pham, Cuong and **Ogunfunmi, Tokunbo**, *Fast On-Line QR-Based RLS Algorithm for Adaptive IIR Filters*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), Atlanta, GA., 1996.
93. Werner, Frank and **Ogunfunmi, Tokunbo**, *High-level synthesis of a Digital Signal Processor chip*, Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS), pp. 77-80, Atlanta, GA., 1996.
94. Wilhojte, Michael and **Ogunfunmi, Tokunbo**, *A decision-directed Bayesian MAP Equalizer*, Proceedings of the 29th IEEE Asilomar Conference On Signals, Systems and Computers, vol. 1, pp. 325-329, Asilomar CA., Nov. 1995.
95. **Ogunfunmi, Tokunbo**, *Applications of Alternative Implementations of 2-D Discrete Orthogonal Transforms in Image Processing*, Proceedings of the 29th IEEE Asilomar Conference on Signals, Systems and Computers, 1995, Asilomar CA., Nov. 1995.
96. Worsley, Debra and **Ogunfunmi, Tokunbo**, *Invited paper: A method for bridging the LAN and WAN for Multimedia Networking*, Proceedings of the IEEE Military Communications (MILCOM) Conference, vol. 2, pp. 448-452, Nov. 1995.
97. Wilhojte, Michael and **Ogunfunmi, Tokunbo**, *Invited paper: Convergence Properties of the Frequency-domain Block-LMS Volterra Adaptive Filter*, Proceedings of the IEEE Midwest Symposium on Circuits and Systems, vol. 2, pp. 1002-1006, Rio de Janeiro, Brazil, August 1995.
98. Chang, Shue-Lee and **Ogunfunmi, Tokunbo**, *A Fast Discrete Cosine Transform (DCT) (Feig's) Algorithm Design and Implementation and application in MPEG1 video compression*, Proceedings of the IEEE Midwest Symposium on Circuits and Systems, vol. 2, pp. 961-964, Rio de Janeiro, Brazil, August 1995.
99. Worsley, Debra and **Ogunfunmi, Tokunbo**, *A method for bridging the LAN and WAN for Multimedia Networking*, Proceedings of the IASTED International Conference on Distributed Multimedia Systems and Applications, Aug. 1995.
100. **Ogunfunmi, Tokunbo** and Dang, Laurence, *Performance Analysis of Wavelet-transform-based adaptive filtering*, Proceedings of the 28th IEEE Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 288-292, Asilomar CA, Nov. 1994.
101. **Ogunfunmi, Tokunbo** and Au, Michael, *Two-dimensional Discrete orthogonal transform from two-dimensional LMS Algorithms*, Proceedings of the 28th IEEE Asilomar Conference on Signals, Systems and Computers, vol. 2, pp. 1493-1496, Asilomar CA, Nov. 1994.
102. **Ogunfunmi, Tokunbo** and Chen, Zhuobin, *Neural Network algorithms based on the QR decomposition method of least-squares*, Proceedings of the IEEE International Conference on Acousitcs, Speech and Signal Processing (ICASSP), vol. 3, pp. 493-496, April 1994.
103. Subramani, Nandini and **Ogunfunmi, Tokunbo**, *VLSI Design and Implementation of a Discrete Cosine Transform chip for video compression using high-level synthesis tools*, Proceedings of the 37th IEEE Midwest Symposium on Circuits and Systems, vol. 1, pp. 66-69, Lafayette, LA, USA August, 1994.

104. **Ogunfunmi, Tokunbo** and Desai, Shailendra, *Fast FIR Filter Implementation using high-level synthesis tools*, Proceedings of the 37th IEEE Midwest Symposium on Circuits and Systems, vol. 1, pp. 58-61, Lafayette, LA, USA August, 1994.
105. **Ogunfunmi, Tokunbo** and Desale, Pravin, *FIR Filter and synthesis using Olympus*, Proceedings of the 37th IEEE Midwest Symposium on Circuits and Systems, vol. 1, pp. 448-451, Lafayette, LA, USA August, 1994.
106. **Ogunfunmi, Tokunbo** and Ling, Nam, *Comparisons of different systolic arrays for the QR Decomposition-based least-squares technique*, Proceedings of the IEEE 37th Midwest Symposium on Circuits and Systems, vol. 1, pp. 306-309, Lafayette, LA, USA August, 1994.
107. **Ogunfunmi, Tokunbo**, *A Short Tutorial on Adaptive Digital Signal Processing*, Proceedings of the Digital Signal Processing DSPX Symposium, San Jose, CA, October 1993.
108. **Ogunfunmi, Tokunbo**, *Adaptive Interference Cancellation using the FELMS Algorithm on the TMS320C30*, Proceedings of the 1993 International Conference on Signal Processing Applications and Technology (ICSPAT), Santa Clara, CA, USA September, 1993.
109. Cheng, Fang-Chen and **Ogunfunmi, Tokunbo**, *A 2-D Transform-domain adaptive filter based on the 2-D Discrete Cosine Transform*, Proceedings of the International Conference on Signal Processing Applications and Technology (ICSPAT 93), Santa Clara, September 1993.
110. **Ogunfunmi, Tokunbo**, *Implementation of the Hartley-Transform-based Block LMS Algorithm*, Proceedings of the ASME Computers In Engineering (CIE) Conference, San Diego, CA, August 1993.
111. **Ogunfunmi, Tokunbo** and Ling, Nam, *Application of the QR Decomposition-based Least Squares technique to Improve Air Traffic Control Radar*, Proceedings of the IEEE 36th Midwest Symposium on Circuits and Systems, vol. 1, pp. 488-491, Detroit, MI, August 1993.
112. **Ogunfunmi, Tokunbo** and Chen, Zhuobin, *A method for adaptive beamforming based on an Inverse QR decomposition*, Proceedings of the IEEE 27th Asilomar Conference on Signals, Systems and Computers, vol. 2, pp. 1598-1602, Asilomar, CA, Nov. 1993.
113. **Ogunfunmi, Tokunbo**, *Efficient Implementation of Long FIR Filters Using the TMS320C25 and TMS320C30 DSPs*, Proceedings of the International Conference on Signal Processing Applications and Technology (ICSPAT), Boston, MA, November 2-5, 1992.
114. **Ogunfunmi, Tokunbo**, *Performance comparisons of the forward-backward LMS adaptive filters and the Split-path LMS adaptive filters for adaptive line enhancement*, Proceedings of the IEEE Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 512-516, Asilomar, CA., 1992.
115. **Ogunfunmi, Tokunbo**, *Comparisons of the forward-backward LMS adaptive filters with the gradient adaptive lattice filter*, Proceedings of the IEEE 35th Midwest Symposium on Circuits and Systems, Washington, D.C., August 9-12, 1992.
116. **Ogunfunmi, Tokunbo** and Cheng, Fang-Chen, *A new two-dimensional LMS adaptive algorithm for image processing applications*, Proceedings of the IEEE 35th Midwest Symposium on Circuits and Systems, Washington, D.C., August 9-12, 1992.

117. Pierson, John, Small, Brian and **Ogunfunmi, Tokunbo**, *The PS Engine Control Module with Data Acquisition*, Proceedings of the Second TMS320 Educators Conference Texas Instruments International Conference on DSP Applications, Houston, Texas, August, 1992.
118. Khan, E. and **Ogunfunmi, Tokunbo**, *A multi-layered neural net controller for Servo Systems*, Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN), vol. 2, pp. 1577-1581, Nov. 1991.
119. **Ogunfunmi, Tokunbo**, *Performance analysis of the new implementation for the frequency-domain LMS adaptive filter*, Proceedings of the IEEE 34th Midwest Symposium on Circuits and Systems vol.1, pp. 501-504, May, 1991.
120. **Ogunfunmi, Tokunbo** and Pham, Cuong, *The transform-domain forward-backward LMS Adaptive filter with applications*, Proceedings of the IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, Vol. 2, pp. 709-712, 1991.
121. Mourad, S. and **Ogunfunmi, Tokunbo**, *CAD Tools in an ASIC Course*, Proceedings of the 4th IEEE International ASIC Conference, pp. P17-2/1-4, Sept. 1991.
122. **Ogunfunmi, Tokunbo** and Peterson, A.M., *Alternative Implementations for the Frequency-domain LMS Adaptive filter*, Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), vol. 3, pp.1441-1444, April, 1990.
123. **Ogunfunmi, Tokunbo** and Peterson, A.M., *Fast, Direct Implementation of Time-domain Block LMS Adaptive filters*, Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), vol. 2, pp. 920-923, May, 1989.
124. **Ogunfunmi, Tokunbo** and Peterson, A.M., *Adaptive methods for estimating amplitudes and frequencies of narrow-band signals*, Proceedings of the IEEE International Symposium Circuits and Systems (ISCAS), May, 1989.

V. Other Technical Presentations/Tutorials/Workshops

1. **Ogunfunmi, Tokunbo**, *University 41st Inaugural Public Lecture: Technology Convergence and the Promise of Internet of Things: Prospects for Developing Economies*, Covenant University, Ota-Lagos, Nigeria, March 2015.
2. **Ogunfunmi, Tokunbo**, *Tutorial: Linear and Nonlinear Adaptive Filters*, Proceedings of the 2014 IEEE Midwest Symposium on Circuits and Systems (MWSCAS), College Station, TX, August 2014.
3. **Ogunfunmi, Tokunbo**, *Tutorial: Principles of Adaptive Filters: Recent Advances and Open Problems*, Proceedings of the 2014 IEEE International Symposium on Circuits and Systems (ISCAS), Melbourne, Australia, June 2014.
4. **Ogunfunmi, Tokunbo**, *Invited Special Session: Speech Coding and Speech Recognition*, IEEE Asilomar Conference on Signals, Systems and Computers, at Asilomar, CA, Nov. 2014. Organized and Chaired the Special Session.
5. **Ogunfunmi, Tokunbo**, Narasimha, M.J. and Tognieri, Roberto, *Tutorial: Advances in Speech Coding, Speech Recognition and Applications*, Proceedings of the 2012 IEEE International Symposium on Circuits and Systems (ISCAS), Seoul, Korea, May 2012.

6. Anagnos, Thalia and **Ogunfunmi, Tokunbo**, *Invited Report: External Review of San Francisco State MS in Engineering Program*, SFSU, San Francisco, CA, Nov 2013.
7. **Ogunfunmi, Tokunbo**, *Tutorial: Advances in Wireless Local Area Networks*, Proceedings of the 2013 IEEE International Symposium on Circuits and Systems (ISCAS), Beijing, China, May 2013.
8. **Ogunfunmi, Tokunbo**, *Workshop: Re-Thinking Circuits and Systems Education: Alternative Approaches and Pedagogies*, Proceedings of the 2012 IEEE ISCAS Conference, Beijing, China, May 2013. Organized and Chaired the Workshop. Invited Other Speakers.
9. **Ogunfunmi, Tokunbo**, *Workshop: FPGAs for Digital Signal Processing Applications*, Editor, Proceedings of the IEEE Workshop on FPGAs for Digital Signal Processing Applications, IEEE SPS Santa Clara Valley Section, Feb. 7, 2009.
10. **Ogunfunmi, Tokunbo**, *Workshop: Bio-Informatics and Bio-Signal Processing*, Editor, Proceedings of the IEEE Workshop on Bio-Informatics and Bio-Signal Processing, IEEE SPS Santa Clara Valley Section, Aug. 30, 2008.
11. **Ogunfunmi, Tokunbo** and Paul, Thomas, *Software for Download: Simulink Model of the IEEE 802.11n PHY Layer Model*, Mathworks MATLAB Central Software available for Download at <http://www.mathworks.com/matlabcentral/fileexchange/22137>, Nov. 2008.
12. Burr, J.B., Duluk, J.F., Li, W., Twicken, J.D., Choi, K., **Ogunfunmi, Tokunbo**, Ekroot, B., Park, W.-S., Linscott, I.R. and Peterson, A.M., *VLSI Design Report: A 20MHz Prime Factor DFT Processor*, Stanford Center for Radar Astronomy Internal Report, June 1987.
13. **Ogunfunmi, Tokunbo**, Several internal reports generated at Santa Clara University and at Stanford University. Reports on sponsored project, internal and external grants, sabbatical leaves, etc. (Details available on request).

VI. Keynote Talks and Other Invited Talks

1. **Ogunfunmi, Tokunbo**, *Invited Talk: Scalable Multi-Rate Speech Coder for VoIP Networks: Beyond iLBC*, IEEE Signal Processing Society Meeting, UT Dallas (UTD) Chapter, Oct. 2014.
2. **Ogunfunmi, Tokunbo**, *Invited Talk: Scalable Multi-Rate Speech Coder for VoIP Networks*, Southern Methodist University (SMU), Dallas, TX, Dec. 2014.
3. **Ogunfunmi, Tokunbo**, *Invited Keynote Talk: Nonlinear Adaptive Algorithms and Applications*, Keynote Speech presented at the Proceedings of the 2013 IEEE RPIC XV Workshop, Bariloche, Sept. 2013.
4. **Ogunfunmi, Tokunbo**, *Invited IEEE Distinguished Lecture Program (DLP) Talk: Algorithm and Architecture Co-Design for fast Motion Estimation*, Engineers Australia, Sydney, Sept. 2013.
5. **Ogunfunmi, Tokunbo**, *Invited IEEE Distinguished Lecture Program (DLP) Talk: Algorithm and Architecture Co-Design for fast Motion Estimation*, IEEE Victoria Section, Australia, Melbourne, Sept. 2013.

6. **Ogunfunmi, Tokunbo**, *Invited IEEE Distinguished Lecture Program (DLP) Talk: ???Speech Coding and Applications*, IEEE Victoria Section, Australia, Melbourne, Sept. 2013.
7. **Ogunfunmi, Tokunbo**, *Invited Keynote Talk: Nonlinear Adaptive Algorithms and Applications*, Proceedings of the 2013 International Conference on Communication and Electronic System Design (ICCESD), MNIT, Jaipur, India, Jan. 2013.
8. **Ogunfunmi, Tokunbo**, *Invited IEEE Distinguished Lecture Program (DLP) Talk: Nonlinear Adaptive Algorithms and Applications*, Indian Institute of Technology (IIT), Delhi, India, Jan. 2013.
9. **Ogunfunmi, Tokunbo**, *Invited IEEE Distinguished Lecture Program (DLP) Talk: Algorithm and Architecture Co-Design for fast Motion Estimation*, IEEE Toronto Section, Dec. 2012.
10. **Ogunfunmi, Tokunbo**, *Invited Keynote Talk: Talk to Me: An Introduction to Speech Coding*, Proceedings of the 2011 IEEE Conference on Adaptive Science and technology (ICAST), Abuja, Nigeria, Sept. 2011.
11. **Ogunfunmi, Tokunbo**, *Invited Keynote Talk: Adaptation as a System Attribute: Key principles for solving challenging engineering problems*, Proceedings of the 2009 IEEE Conference on Adaptive Science and technology (ICAST), Abuja, Nigeria, Dec. 2009.
12. Gave the following invited lectures:
 - Gave 3 invited lectures over the summer 2012: The first talk titled "Nonlinear Adaptive Algorithms and Applications" was given at the University of Auckland and also at the University of Western Australia, July 2012. The talk titled "Algorithm and Architecture Co-Design for Fast Motion Estimation Video" was given at the University of Wollongong, Australia, July 2012
 - Gave an invited talk titled "Algorithm and Architecture Co-Design for Fast Motion Estimation in H.264/AVC" to the faculty, students and IEEE Members at the Seoul National University, Seoul, Korea, May 2012.
 - Gave an invited paper titled "Coding of Speech Signals: Current Standards and Future Directions", to the BAIPAEIC Workshop co-organized by SCU Prof. Yuling Yan, April 22-23, 2011.
 - Gave two invited talks titled "New Algorithms for Fast Motion Estimation in H.264/AVC" and "New Hardware Architectures for Fast Motion Estimation in H.264/AVC", to the IEEE Members at the Universidade Federale do Rio do Grande Sul (UFRGS), Porto Alegre, Brazil, May 2011.
 - Gave an invited lecture to faculty and students at Dept. of Electrical Engineering, Howard University, Washington DC on my research into nonlinear adaptive filters, Sept. 2008 and Sonoma State University, Sonoma, CA on my research into speech coding, Nov. 2008.
 - Gave several invited lectures to faculty and students at Dept. of Electrical Engineering, The University of Texas, Arlington, TX on my research into Speech Coding and on Architectures for fast Motion Estimation in H.264 video coding.
etc.

4 SERVICE TO THE UNIVERSITY AND THE PROFESSION

4.1 Services and memberships in professional organizations

4.1.1 Professional society memberships

Senior Member of Institute of Electrical and Electronics Engineers (I.E.E.E.)

Member of Institute of Engineering Technology (I.E.T.) (formerly Institute of Electrical Engineers (I.E.E.))

Member of American Association for the Advancement of Science (A.A.A.S.)

Member of Sigma Xi, The Scientific Research Society.

Member of American Society for Engineering Education (A.S.E.E.)

Member of National Society of Black Engineers (N.S.B.E.).

4.1.2 Service to the Profession

- Distinguished Lecturer, IEEE Circuits and Systems Society, 2011-2013
- Editorial Boards of Journals
 - Associate Editor, IEEE Transactions on Circuits and Systems-II: (TCAS2), 2014-date
 - Associate Editor, IEEE Transactions on Circuits and Systems-I:(TCAS1) Regular papers, 2012-2014
 - Senior Associate Editor, IEEE Signal Processing Letters, 2014-date
 - Associate Editor, IEEE Signal Processing Letters, 2012-2013
 - Associate Editor, **Circuits, Systems and Signal Processing** Journal, (2008-date).
- Chair, IEEE Circuits and Systems for Communications (CASCOS) Technical Committee within the Circuits and Systems (CAS) Society, 2014-date.
- Chair-Elect, IEEE Circuits and Systems for Communications (CASCOS) Technical Committee within the Circuits and Systems (CAS) Society, 2012-2014.
- Chair, IEEE Circuits and Systems Education and Outreach (CASEO) Technical Committee within the Circuits and Systems (CAS) Society, 2011-2013.
- Chaired about 3 sessions at the IEEE ISCAS Conference May of every year to date.
- Attended an NSF Workshop on Concept Inventories, Washington, DC, August 2012
- Invited member on approx. 3 proposal review panels/year for the Directorate of Engineering, National Science Foundation, 2008-date.
- Conference Technical Committees
 - Technical Program Chair, IEEE International Symposium on Circuits and Systems (IS-CAS), 2019, Hokkaido, Japan.
 - General Co-Chair, 2011 IEEE International Conference on Adaptive Systems and Technology (ICAST), Abuja, Nigeria.
 - Member, Technical Committee on Digital Signal Processing (DSP) of the IEEE Circuits and Systems Society. 2007-date.

- Chair, Technical Program Committee, 2009 IEEE International Conference on Adaptive Systems and Technology (ICAST), Accra, Ghana.
 - Member, Technical Program Committee, 2008 IEEE International Conference on Circuits and Systems for Communications (ICCSC).
 - Member, Technical Program Committee, IEEE Workshop on Signal Processing Systems (SiPS), Oct. 2000-date.
 - Member, Technical Program Committee, Signal and Image Processing Systems (SIPS) Workshop, 2000 in Lafayette. Louisiana.
 - Publications Chair, Member of Organizing Committee, 2nd and 3rd WEMP (Workshop and Exhibition on MPEG4) Conference, San Jose, CA, June 2001, 2002.
 - Member, Technical Committee of the 1993 International Conference on Signal Processing Applications and Technology (ICSPAT93).
- Member, Technical Committee on Circuits and Systems for Communications (CASCOM) of the IEEE Circuits and Systems Society. 2004-date.
 - Chair, IEEE Signal Processing Society, Santa Clara Valley Chapter, 2007-2009. There is a spotlight article on our chapter's recent activities in a recent issue of the IEEE Inside Signal Processing Newsletter. Visit <http://enews.ieee-spm.org/> for full content. PDF version <http://enews.ieee-spm.org/eNews200803.pdf>
 - IEEE Award for meritorious service as the 2007-2008 Chair of the IEEE Signal Processing Society Santa Clara Valley Chapter, August 2008.
 - Program Chair, IEEE Signal Processing Society (SPS), Santa Clara Valley (SCV) chapter, 1996-98.
 - Member, Steering Committee, IEEE Signal Processing Society (SPS), Santa Clara Valley (SCV) chapter, 2001-2007, 2014-date.
 - Member, National Science Foundation Technical Proposal Review Panels, Responsible for evaluating,, ranking technical and potential merits of proposals submitted to the National Science Foundation. 2008-date.
 - Member, Joint Video Team (JVT) Lincs ISO/IEC JTC1/SC29 Plenary WG1/WG11/JVT Meetings. Responsible for developing new video coding standards H.264, 2007-date.
 - Review Coordinator Member (RCM) Track Chair, IEEE ISCAS conference, 2004-date. Responsible for assigning reviewers and coordinating reviews for all papers submitted to the track.
 - Editorial Board Member, IASTED Technical Committee on Signal Processing. Responsible for reviewing many submissions to the conference, 2005-date.
 - Chaired Several Technical Sessions at following conferences IEEE ISCAS, IEEE MILCOM, IEEE ICCE, IEEE Midwest Symposium, IEEE SiPS Conference, IASTED, WEMP, ASEE and other conferences.
 - Special Sessions Organized include

1. Organized a special lecture session titled "Speech Processing" at the 2015 DSP Conference, Singapore, July 2015.
 2. Organized a special lecture session titled "Recent Advances in Speech Coding and Enhancement" at the 2014 IEEE Asilomar Conference on Circuits, Systems and Computers, Asilomar, CA Nov. 2014.
 3. Co-organized a special lecture session titled "Circuits and Systems Concept Inventory" at the 2011 IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil from 15 18 May 2011.
 4. Organized a special lecture session titled "Recent Advances in Linear Non Linear Adaptive Filters" at the 2011 IEEE International Symposium on Circuits and Systems, Rio de Janeiro, Brazil from 15 18 May 2011.
 5. Organized a special lecture session titled "Embedded Implementations and Adaptation in Wireless Communication Systems" at the 2011 IEEE International Midwest Symposium on Circuits and Systems, Seoul, Korea, Aug. 2011.
 6. Organized and chaired a successful Special Session at the IEEE Signal Processing Workshop 2000.
 7. Organized and chaired two special sessions on "High-performance architectures for Multimedia" and also on "Electronic Design Automation Tools for Multimedia Chips Design" both at the 1995 IEEE Midwest Symposium on Circuits and Systems.
- Paper Reviewer for
 - IEEE Transactions on Circuits and Systems I and II
 - IEEE Circuits and Systems
 - IEEE Transactions on Circuits and Systems for Video Technology
 - IEEE Transactions on Signal Processing
 - IEEE Transactions on Neural Networks and Learning Systems
 - IEEE Communications Surveys and Tutorials
 - IEEE Signal Processing Letters
 - IET Electronics Letters
 - IET Proceedings on Vision, Image and Signal Processing
 - IEEE International Symposium on Circuits and Systems (ISCAS).
 - IEEE Signal Processing Systems Workshop (SiPS).
 - Neurocomputing journal (special issue edited by Prof. Jacek Zurada).

4.2 Santa Clara University Committees, Boards and Commissions

4.2.1 Santa Clara University

- Chair, University Research committee, 2005/06. Member, 2004-2006. Several issues relating to research were dealt with by this committee, Made recommendations, Selection of Research award recipients, etc.
- Member, University Academic Affairs committee, 1993/94, 1994/95. Issues dealt with included approval of new academic programs, etc.
- Member, University Teaching and Learning committee, 1991/92, 1992/93. Several issues were dealt with by this committee relating to Teaching and Learning, Brutacao awards, etc.

4.2.2 School of Engineering

- Associate Dean for Research and Faculty Development, Sept. 2010-2014.
- Member of the following School committees
 - Member, Faculty Workload Committee (2010, 2011)
 - Chair, Rank and Tenure Committee, 2001-02, Member 1999-02.
 - Engineering Research Task Force (ERTF), Sept. 2003 - date.
 - Member, Researcher of the year Selection Committee (2005, 2006)
 - Member, Center for NanoStructures Steering Committee, Sept. 2003 - Dec. 2005.
 - Member, Grievance Committee (1999-2003), (2004-2007).
 - School of Engineering ABET PIPE Committee, June - Dec. 2003.
 - ABET Mock Visits as ELEN Dept. Acting Chair, Nov. 12, 13, 2003
 - School of Engineering Committee on Faculty Work Load, 2009-date
- Participated in the following Engineering School Events annually
 - University Open House, Santa Clara University. Set up lab demos for digital signal processing lab for visitors to SCU.
 - University Preview Day, Santa Clara University.
 - PhD Students Dinner.
- Founding Faculty advisor, Santa Clara University chapter of the National Society of Black Engineers (NSBE), 1992 - date
- Faculty Advisor, Association of Graduate Engineering Students (AGES), (1996-2002).

4.2.3 Electrical Engineering Department

- Acting Dept. Chair, Electrical Engineering Dept. Santa Clara University, June-Nov. 2003
- Member, Signals and Systems Curriculum Committee, Electrical Engineering Dept., 2006-date
- Director, PhD Program. Administrative responsibility for the program. (2009-2011).
- Prepared and Graded Ph.D. Prelim Exam in Signal Processing Area, Every year (1991-date).
- Faculty Library Liaison to the Orradre Library (1994 – date).
- Faculty in charge of the Graduate Admissions Committee (1991 – 1994)
- Member, 1994 Electrical Engineering Faculty Search Committee.
- Member, new-course curriculum committee, few times.
- Chair, new undergraduate courses (ELEN 10,20) curriculum committee
- Counsellor, IEEE Student Chapter, enlist members (1991-1999, 2009-2010)